# **CISWI**

As defined in § 62.14840,

A CISWI unit is "any combustion device that combusts commercial and industrial waste;"

commercial and industrial waste is defined as "solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility;"

solid waste is defined as

"any garbage, refuse, sludge ... and other discarded material, <u>including solid</u>, <u>liquid</u>, <u>semisolid</u>, <u>or contained gaseous material</u> resulting from industrial, commercial, mining, agricultural operations, and from community activities, but does not include ... material in domestic sewage, or ... point sources subject to permits under section 402 (waste water)..." (emphasis added)

### NOTES on CISWI:

- An incinerator located at a work camp that is associated with some company or industry is considered a CISWI.
- Units commonly referred to as "teepee burners," "wigwam burners," or "corkey burners" are subject to CISWI. These are enclosed devices and are often used to burn wood waste. It is likely that such a unit would physically not be able to comply with this the CISWI regulation, so this rule effectively prohibits the use of these devices.
- A combustion device that is otherwise subject to CISWI, but has energy recovery (the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating), is not currently subject to CISWI. You should be aware however, that EPA is reconsidering the availability and scope of this exemption. See 70 FR 55566 (September 22, 2005). A copy of this Federal Register notice can be accessed on the internet with the following link:
  <a href="http://www.epa.gov/ttn/atw/129/ciwi/fr22se05.html">http://www.epa.gov/ttn/atw/129/ciwi/fr22se05.html</a>
- EPA is reconsidering several aspects of the current CISWI rule in response to a court challenge. EPA has taken a "voluntary remand" of the CISWI rule, meaning that EPA intends to repropose and take additional comment on the CISWI rule, before again finalizing the CISWI rule. Because of that process, several of the exemptions currently available under CISWI may be eliminated or revised or the applicability of the CISWI rule otherwise expanded.

## **HMIWI**

As defined in §62.14490,

A *HMIWI unit* is "any device that combusts any amount of hospital waste and/or medical/infectious waste".

Hospital waste means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

*Hospital* means "any facility which has an organized medical staff, maintains at least six inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients ..." does not include nursing homes

See other definition sheet for more definitions on Medical/Infectious waste (lengthy definitions)

#### NOTE on medical waste:

• Sharp or needles that may be used by diabetics for example, can end up in a municipal solid waste stream. These materials are considered medical waste and could cause you to be subject to HMIWI if incinerated.

# **OSWI**

As defined in §60.2977,

An OSWI unit is "either a very small MWC or an Institutional Waste Incineration unit"

A Very small MWC is "any MWC unit that has the capacity to combust less than 35 TPD ..." There is no lower size cut off.

A MWC unit is "any setting or equipment that combusts municipal solid waste (as defined in this subpart) including, but not limited to, field-erected, modular, cyclonic burn barrel, and custom built incineration units (with or without energy recovery) operating with starved or excess air, boilers, furnaces, pyrolysis/combustion units, and air curtain incinerators" (except those air curtain incinerators burning only clean wood as described in 40 CFR Part 60.2888(b)).

Municipal Solid Waste (MSW) under OSWI, if the total MSW combusted is greater that 30% of the fuel feed stream, MSW under OSWI is defined as "refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock." MSW does not include industrial process wastes or medical wastes that are segregated from such other wastes.

Institutional Waste Incineration unit means any combustion unit that combusts institutional waste (as defined under OSWI) and is a distinct operating unit of the institutional facility that generated the waste. Institutional waste incineration units include field-erected, modular, cyclonic burn barrel, and custom built incineration units operating with starved or excess air, and any air curtain incinerator that is a distinct operating unit of the institutional facility that generated the institutional waste (except those air curtain incinerators burning only clean wood as described in 40 CFR Part 60.2888(b)).

*Institutional Waste* means "solid waste that is combusted at any institutional facility using controlled flame combustion in an enclosed, distinct operating unit: whose design does not provide for energy recovery; operated without energy recovery; or operated with only waste heat recovery (all terms as defined under OSWI). Institutional waste also means solid waste

combusted on site in an air curtain incinerator that is a distinct operating unit of any institutional facility.

See definition of Solid Waste under CISWI definitions.

*Institutional facility* means "a land-based facility owned and/or operated by an organization having a governmental, educational, civic, or religious purpose such as a school, hospital, prison, military installation, church, or other similar establishment or facility."

*Energy recovery* means "the process of recovering thermal energy from combustion for useful purposes such as steam generation or process heating."

Waste heat recovery means "the process of recovering heat from the combustion flue gases outside of the combustion firebox by convective heat transfer only."

### NOTE on OSWI:

- Exemption for units used at Class II or Class III municipal solid waste landfills in Alaska
  Class II municipal solid waste landfill criteria:
  - Accepts, for incineration or disposal, less than 20 tons per day of municipal solid waste or other solid waste based on an annual average;
  - In located on a site where there is no evidence of groundwater pollution caused or contributed to by the landfill;
  - Is not connected by road to a Class I municipal solid waste landfill, as defined by Alaska regulatory code 18 AAC 60.300(c) or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill;
  - Serves a community that meats one of two criteria
    - 1. Experiences for at least three months each year, an interruption in access to a Class I municipal solid waste landfill; or
    - 2. Has no practicable waste management alternative, with a landfill located in an area that annually receives 25 inches or less of precipitation.
  - o Class III municipal solid waste landfill criteria:
    - Is not connected by road to a Class I municipal solid waste landfill, as defined by Alaska regulatory code 18 AAC 60.300(c) or, if connected by road, is located more than 50 miles from a Class I municipal solid waste landfill:
    - Accepts, for disposal, either of the following two criteria:
      - 1. Ash from incinerated municipal waste in quantities less than one ton per day on an annual average, which ash must be free of food scraps that might attract animals; or
      - 2. Less than five tons per day of municipal solid waste, based on an annual average, and is not located in a place that meets either of the following criteria:

- I. Where public access is restricted, including restrictions on the right to move to the place and reside there: or
- II. That is provided by an employer and that is populated totally by persons who are required to reside there as a condition of employment and who do not consider the place to be their permanent residence.